NuPRO-780 BIOS
User's Guide

Manual Rev. 1.00: November 12, 2001

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1. BIOS Setup Introduction

The Award BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the Award BIOS is immediately activated. Pressing the <Del> key immediately allows you to enter the Setup utility. If you are a little bit late pressing the <Del> key, POST (Power On Self Test) will continue with its test routines, thus preventing you from invoking the Setup. If you still wish to enter Setup, restart the system by pressing the "Reset" button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again. The following message will appear on the screen:

```
Press <DEL> to Enter Setup
```

In general, you press the arrow keys to highlight items, <Enter> to select, the <PgUp> and <PgDn> keys to change entries, <F1> for help and <Esc> to quit. When you enter the Setup utility, the Main Menu screen will appear on the screen. The Main Menu allows you to select from various setup functions and exit choices.

CMOS Setup Utility – Copyright (C) 1984-2001 Award Software

Standard CMOS Features	Frequency/Voltage Control
Advanced BIOS Features	Load Fail-Safe Defaults
Advanced Chipset Features	Load Optimized Defaults
Integrated Peripherals	Set Supervisor Password
Power Management Setup	Set User Password
PnP/PCI Configurations	Save & Exit Setup
PC Health Status	Exit Without Saving
ESC : Quit F9 : Menu in BIOS	↑ ↓ → ← : Select Item
F10 : Save & Exit Setup	
Time, Date, Hard Disk Type…	

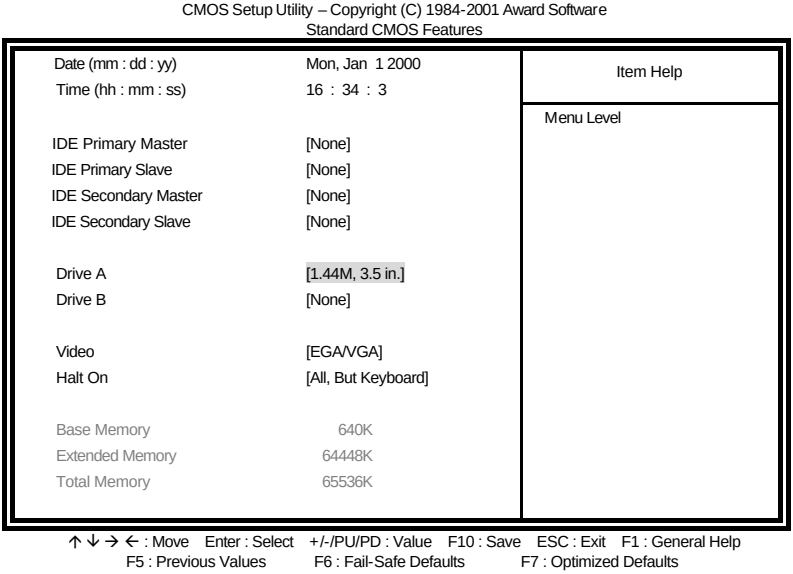
The section below the setup items of the Main Menu displays the control keys for this menu. Another section at the bottom of the Main Menu just below the control keys section displays information on the currently highlighted item in the list.

NOTE 1. After making and saving system changes with Setup, you find that your computer cannot boot, the Award BIOS supports an override to the CMOS settings that resets your system to its default.

2. We strongly recommend that you avoid making any changes to the chipset defaults. These defaults have been carefully chosen by both Award and your system manufacturer to provide the absolute maximum performance and reliability.

2. Standard CMOS Features

"Standard CMOS Setup" item allows you to record some basic hardware configurations in your computer system and set the system clock and error handling. If the motherboard is already installed in a working system, you will not need to select this option. You will need to run the Standard CMOS option, however, if you change your system hardware configurations, the onboard battery fails, or the configuration stored in the CMOS memory was lost or damaged.



At the bottom of the menu are the control keys for use on this menu. If you need any help in each item field, you can press the <F1> key. It will display the relevant information to help you. The memory display at the lower left-hand side of the menu is read-only. It will adjust automatically according to the memory changed. The following describes each item of this menu.

Date

The date format is:

Day	Sun to Sat (read only)
Month	1 to 12
Date	1 to 31
Year	1994 to 2079

To set the date, highlight the " Date" field and use the PageUp/ PageDown or +/- keys to set the current date.

Time

The time format is:

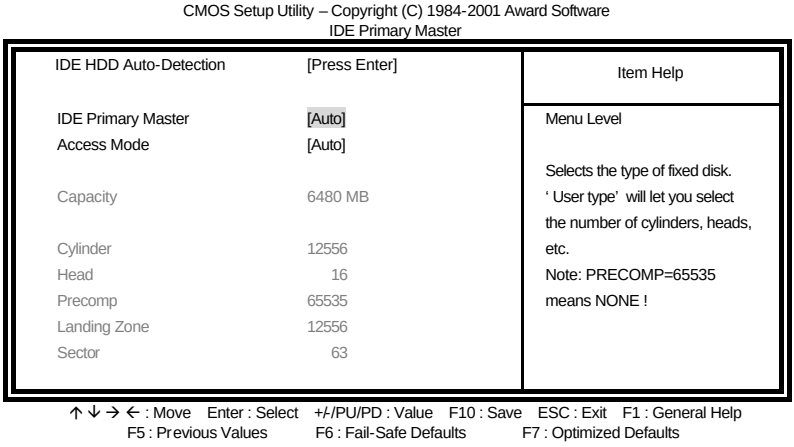
Hour	00 to 23
Minute	00 to 59
Second	00 to 59

To set the time, highlight the"Time" field and use the <PgUp>/ <PgDn> or +/- keys to set the current time.

IDE Primary/Secondary Master/Slave

The onboard PCI IDE connectors provide Primary and Secondary channels for connecting up to four IDE hard disks or other IDE devices. Each channel can support up to two hard disks; the first is the " Master" and the second is the " Slave" .

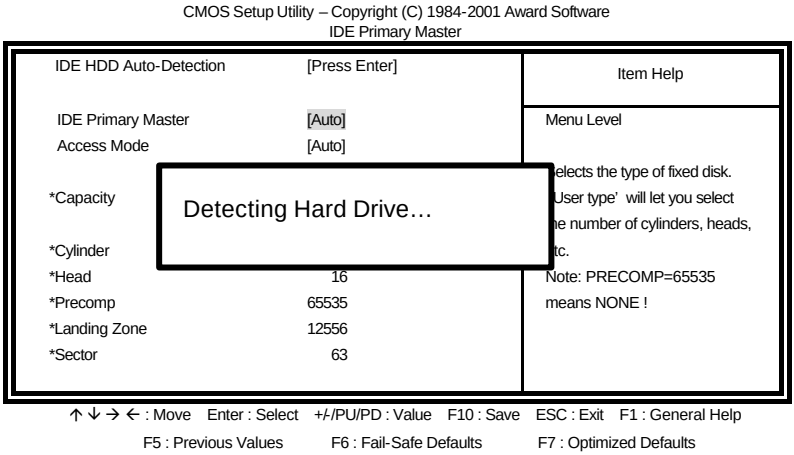
Award CMOS setup utility provides a sub-menu to enter the specifications for a hard disk drive.



The following describes each item of this menu.

IDE HDD Auto-Detection

This item is used to detect the type of hard drive. It will assign the cylinder, head, precomp, landing zone, and sector to the hard drive.



IDE Primary/Secondary Master/Slave

Auto <Default>	BIOS will auto detect the hard disk type.
Manual	User can assigns the type of hard disk when the access mode is normal.
None	Selects this selection when there is no hard disk in the system.

Access Mode

Auto <Default>	Auto-detect the HDD mode
Normal	HD < 528MB
Large	For MS-DOS only
LBA	HD > 528MB and supports Logical Block Addressing

If your hard disk drive type is not matched or listed, you can use normal access mode to define your own drive type manually. If you select normal access mode, related information is asked to be entered to the following items.

Cylinder	Number of cylinders
Head	Number of read/write heads
Precomp	Write precompensation
Landing Zone	Landing zone
Sector	Number of sectors

NOTE: The specifications of your drive must match with the drive table. The hard disk will not work properly if you enter incorrect information in these fields.

The ***Capacity*** item automatically adjust according to the configuration.

Drive A / Drive B

These fields identify the types of floppy disk drive A or drive B that hasbeen installed in the computer. The available specifications are:

None	No floppy drive be installed
360KB 5.25 in.	5.25 inch floppy drive, 360KB capacity
1.2MB 5.25 in.	5.25 in. floppy drive, 1.2MB capacity
720KB 3.5 in.	3.5 in. floppy drive, 720KB capacity
1.44MB 3.5 in. <Default>	3.5 in. floppy drive, 1.44MB capacity
2.88MB 3.5 in.	3.5 in. floppy drive, 2.88MB capacity

Video

This field selects the type of video display card installed in your system. You can choose the following video display cards.

EGA/VGA <Default>	For EGA, VGA, SEGA, SVGA or PGA monitor adapters.
CGA 40	Power up in 40 column mode.
CGA 80	Power up in 80 column mode.
MONO	For Hercules or MDA adapters.

Halt On

This field determines whether the system will halt if an error is detected during power up.

No Errors	The system boot will not be halted for any error that may be detected.
All Errors	Whenever the BIOS detects a non-fatal error, the system will stop and you will be prompted.
All, But Keyboard <Default>	The system boot will not be halted for a keyboard error; it will stop for all other errors
All, But Diskette	The system boot will not be halted for a disk error; it will stop for all other errors.
All, But Disk/Key	The system boot will not be halted for a keyboard or disk error; it will stop for all others.

3. Advanced BIOS Features

This section allows you to configure and improve your system and allows you to set up some system features according to your preference.

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Advanced BIOS Features

Virus Warning	[Disabled]	Item Help
CPU Internal Cache	[Enabled]	
External Cache	[Enabled]	Menu Level
CPU L2 Cache ECC Checking	[Enabled]	
Quick Power On Self Test	[Disabled]	Allows you to choose the VIRUS
First Boot Device	[Floppy]	warning feature for IDE Hard
Second Boot Device	[HDD-0]	Disk boot sector protection.
Third Boot Device	[LS120]	If this function is enabled and
Boot Other Device	[Enabled]	someone attempt to write data
Swap Floppy Drive	[Disabled]	into this area, BIOS will show
Boot Up Floppy Seek	[Enabled]	a warning message on screen
Boot Up NumLock Status	[On]	and alarm beep
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	[Setup]	
OS Select For DRAM > 64MB	[Non-OS2]	
Summary Screen Show	[Disabled]	

↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1 : General Help
F5 : Previous Values F6 : Fail-Safe Defaults F7 : Optimized Defaults

Virus Warning

Enabled	This item protects the boot sector and partition table of your hard disk against accidental modifications. If an attempt is made, the BIOS will halt the system and display a warning message. If this occurs, you can either allow the operation to continue or run an anti-virus program to locate and remove the problem.
Disabled <Default>	No warning message appears

NOTE: Many disk diagnostic programs, which attempt to access the boot sector table, can cause the virus warning. If you will run such a program, disable the Virus Warning feature.

CPU Internal Cache / External Cache

Cache memory is additional memory that is much faster than conventional DRAM (system memory). CPUs from 486-type on up contain

internal cache memory, and most, but not all, modern PCs have additional (external) cache memory. When the CPU requests data, the system transfers the requested data from the main DRAM into cache memory, for even faster access by the CPU. These items allow you to enable (speed up memory access) or disable the cache function.

Enabled <Default>	Open CPU Internal Cache / External Cache
Disabled	Close CPU Internal Cache / External Cache

CPU L2 Cache ECC Checking

This option enables the level 2 cache memory ECC(error check correction). The default of this item is ***Enabled***.

Quick Power On Self Test

When enabled, this field speeds up the Power On Self Test (POST) after the system is turned on. If it is set to *Enabled*, BIOS will skip some items.

Enabled	Enable quick POST

First/Second/Third/Other Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in the following items. The settings are:

Disabled	Floppy	LS120
HDD-0	SCSI	CDROM
HDD-1	HDD-2	HDD-3
ZIP100	USB-FDD	USB-ZIP
USB-CDROM	LAN	

Swap Floppy Drive

This item allows you to determine whether to enable Swap Floppy Drive or not.

Enabled	The BIOS swaps floppy drive assignments so that Drive A becomes Drive B, and Drive B becomes Drive A.
Disabled <Default>	Disable the BIOS to swap floppy drive

Boot Up Floppy Seek

Enabled	The BIOS will seek whether or not the floppy drive installed has 40 or 80 tracks. 360K type has 40 tracks while 760K, 1.2M and 1.44M all have 80 tracks
Disabled <Default>	BIOS will not search the type of floppy disk drive by track number

Boot Up NumLock Status

On <Default>	Keypad is number keys
Off	Keypad is arrow keys

Gate A20 Option

This field allows you to select how Gate A20 is worked. Gate A20 is a device used to address memory above 1 MB.

Fast <Default>	The A20 signal controlled by chipset specific method
Normal	The A20 signal controlled by keyboard controller or chipset hardware

Typematic Rate Setting

Enabled	Enable typematic rate and typematic delay programming
Disabled <Default>	Disable typematic rate and typematic delay programming. The system BIOS will use default value of these 2 items and the default controlled by keyboard

Typematic Rate (Chars/Sec)

When the typematic rate is enabled, the system registers repeated keystrokes speeds. You can select speed range from 6 to 30 characters per second. By default, this item is set to ***6.***

Typematic Delay (Msec)

When the typematic rate is enabled, this item allows you to set the time interval for displaying the first and second characters. By default, this item is set to ***250msec.***

Security Option

This field allows you to limit access to the System and Setup.

Setup <Default>	the system always boots up and prompts for the Supervisor Password only when the Setup utility is called up
System	the system prompts for the User Password every time you boot up

NOTE: To disable security, select PASSWORD SETTING at Main Menu and then you will be asked to enter the password. If you do not type anything and just press <Enter> key, it will disable security. Once the security is disabled, you can boot up the system and access to Setup freely.

OS Select for DRAM > 64MB

This option allows the system to access greater than 64MB of DRAM memory when used with OS/2 that depends on certain BIOS calls to access memory. The default setting is ***Non-OS/2***.

Summary Screen Show

When POST, BIOS will lists the PCI devices and system configurations on the screen to tell user what configurations are on the system. This item allows you to decide whether system shows the configuration or not. The default is ***Enabled***.

4. Advanced Chipset Features

This Setup menu controls the configuration of the chipset.

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Advanced Chipset Features

SDRAM CAS Latency Time	[Auto]	Item Help
SDRAM Cycle Time Tras/Trc	[Auto]	
SDRAM RAS-to-CAS Delay	[Auto]	Menu Level
SDRAM RAS Precharge Time	[Auto]	
System BIOS Cacheable	[Disabled]	
Video BIOS Cacheable	[Disabled]	
Memory Hole At 15M-16M	[Disabled]	
CPU Latency Timer	[Disabled]	
Delayed Transaction	[Enabled]	
AGP Graphics Aperture Size	[64MB]	
Display Cache Frequency	[100 MHz]	
FWH Write Protection	[Disabled]	
On-Chip Video Window Size	[64MB]	
* Onboard Display Cache Setting *		
CAS# Latency	[3]	
Paging Mode Control	[Open]	
RAS-to-CAS Override	[by CAS# LT]	
RAS# Timing	[Fast]	
RAS# Precharge Timing	[Fast]	

↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1 : General Help
F5 : Previous Values F6 : Fail-Safe Defaults F7 : Optimized Defaults

SDRAM CAS Latency Time

When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. The default is ***Auto***.

SDRAM Cycle Time Tras/Trc

Select the number of SCLKs for an access cycle. The default setting is ***Auto***.

SDRAM RAS-to-CAS Delay

This field lets you insert a timing delay between the CAS and RAS strobe signals, used when DRAM is written to, read from, or refreshed. This field applies only when synchronous DRAM is installed in the system. The default is ***Auto***.

SDRAM RAS Precharge Time

If an insufficient number of cycles is allowed for the RAS to accumulate its charge before DRAM refresh, the refresh may be incomplete and the DRAM may fail to retain data. The default is ***Auto***.

NOTE: All related settings of SDRAM are set to Auto. It means that all parameters of SDRAM are decided by the SPD value of Memory. BIOS will use the optimized settings to configure the SDRAM that on your system.

System BIOS Cacheable

When this function is enabled, the BIOS ROM's addresses at F0000H-FFFFFH will be duplicated into the SRAM. It will work with the cache controller that is enabled.

Enabled <Default>	BIOS access cached
Disabled	BIOS access not cached

Video BIOS Cacheable

As with caching the system BIOS above, enabling the Video BIOS cache will cause access to video BIOS addressed at C0000H to C7FFFH to be cached, it the cache controller is also enabled.

Enabled <Default>	Video BIOS access cached
Disabled	Video BIOS access not cached

Memory Hole at 15MB - 16MB

In order to improve performance, certain space in memory can be reserved for ISA cards. This field allows you to reserve 15MB to 16MB memory address space to ISA expansion cards. This makes memory from 15MB and up unavailable to the system. Expansion cards can only access memory up to 16MB. By default, this field is set to ***Disabled***.

CPU Latency Timer

When ***Disabled***, a "deferrable" CPU cycle will be deferred immediately after the chipset receives another ADS#. The default is ***Disabled***.

Delayed Transaction

The chipset has an embedded 32-bit posted write buffer to support delay transactions cycles. Select ***Enabled*** to support compliance with PCI specification version 2.1. The default setting is ***Enabled***.

AGP Graphics Aperture Size

This field determines the effective size of the Graphic Aperture used for a particular GMCH configuration. It can be updated by the GMCH-specific BIOS configuration sequence before the PCI standard bus enumeration sequence takes place. If it is not updated then a default value will select

an aperture of maximum size. The choices are ***32MB*** and ***64MB***.

Display Cache Frequency

You can use this item to select the frequency of the display cache. The choices are ***100MHz*** and ***133MHz***.

FWH Write Protection

To protect the BIOS from destroying by some reasons, this item lets user to select the protection type to avoid BIOS errors.

Disabled <Default>	User can flash BIOS anywhere.
TBL_Only	Top Block Lock, top block area doesn' t change when flashing the new BIOS.
Enabled	User can' t flash the newer BIOS file.

On-Chip Video Window Size

Select the on-chip video window size for VGA driver use. The default is **64MB**. If the ***Disabled*** is selected, the system will not boot with no other VGA card.

Followings are the setting of onboard display cache timing.

CAS# Latency

Select the local memory clock periods. The choice : ***2***, ***3***.

Paging Mode Control

Select the paging mode control. It will let memory controller to leave memory pages ***open*** or ***close***.

RAS-to-CAS Override

Select the display cache clock periods control. Default is determined by the value of CL(CAS# Latency).

RAS# Timing

This item control RAS# active to Protegra, and refresh to RAS# active delay (in local memory clocks).

RAS# Precharge Timing

This item controls RAS# precharge (in local memory clocks).

5. Integrated Peripherals

This option sets your hard disk configuration, mode and port.

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Integrated Peripherals

On-Chip Primary PCI IDE	[Enabled]	Item Help
On-Chip Secondary PCI IDE	[Enabled]	
IDE Primary Master PIO	[Auto]	Menu Level
IDE Primary Slave PIO	[Auto]	
IDE Secondary Master PIO	[Auto]	
IDE Secondary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	
IDE Primary Slave UDMA	[Auto]	
IDE Secondary Master UDMA	[Auto]	
IDE Secondary Slave UDMA	[Auto]	
USB Controller	[Enabled]	
USB Keyboard Support	[Disabled]	
Init Display First	[PCI Slot]	
AC97 Audio	[Auto]	
Onboard 82559 Lan Chip	[Enabled]	
IDE HDD Block Mode	[Enabled]	
Onboard Lan Boot ROM	[Disabled]	
Onboard FDC Controller	[Enabled]	
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2E8/IRQ3]	
UART Mode Select	[Normal]	
RxD , TxD Active	[Hi,Lo]	
IR Transmission Delay	[Enabled]	
UR2 Duplex Mode	[Half]	
Use IR Pins	[IR-Rx2]	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
EPP Mode Select	[Epp1.9]	
ECP Mode Use DMA	[3]	

↑ ↓ → ← : Move Enter : Select +/-/PU/PD : Value F10 : Save ESC : Exit F1 : General Help
F5 : Previous Values F6 : Fail-Safe Defaults F7 : Optimized Defaults

On-Chip Primary/Secondary PCI IDE

The integrated peripheral controller contains an IDE interface with support for two IDE channels. Select ***Enabled*** to activate each channel separately.

IDE Primary/Secondary Master/Slave PIO

These fields allow your system hard disk controller to work faster. Rather than have the BIOS issue a series of commands that transfer to or from the disk drive, PIO (Programmed Input/Output) allows the BIOS to communicate with the controller and CPU directly.

The system supports five modes, numbered from 0 to 4, which primarily

differ in timing. When Auto is selected, the BIOS will select the best available mode.

Auto<Default>	Auto select which mode that BIOS communicates with the controller and CPU
Mode0~Mode4	User define the PIO mode

IDE Primary/Secondary Master/Slave UDMA

These fields allow your system to improve disk I/O throughput to 33Mb/sec with the Ultra DMA/33 feature. Intel 815E chipset supports up to ATA100 feature. The options are Auto<Default> and Disabled.

USB Controller

Select ***Enabled*** if your system contains a Universal Serial Bus (USB) controller and you have USB peripherals. The default is ***Enabled***.

USB Keyboard Support

Select ***Enabled*** if your system contains a Universal Serial Bus (USB) controller and you want to use a USB keyboard under DOS environment.

Init Display First

This item allows you to decide to activate whether PCI Slot or on-chip VGA first. The default is ***PCI Slot***.

AC97 Audio

NuPRO-780 support an optional AC97 Audio module. User can decide to add an AC97 module on NuPRO-780 board. When setting is ***Auto***, BIOS will auto detect the codec of AC97 and configures it if there has an AC97 module.

Onboard 82559 Lan Chip

NuPRO-780 has a function that can enable/disable the onboard 82559 Lan chip to decide if you want to use two Lans or not. The default is ***Enabled***.

IDE HDD Block Mode

This field allows your hard disk controller to use the fast block mode to transfer data to and from your hard disk drive.

Enabled<Default>	IDE controller uses block mode
Disabled	IDE controller uses standard mode

Onboard Lan Boot ROM

This item allows you to decide to support PXE function or not. The PXE function can lets system boot from a network environment. To support it, it also need a DHCP server to link the system. We only support this function from the onboard 82562EM Lan chip.The default setting is ***Disabled***.

Onboard FDC Controller

Select ***Enabled*** if your system has a floppy disk controller (FDC) installed on the system and you wish to use it. If you install an add-in FDC or the system has no floppy drive, select ***Disabled*** in this field. This option allows you to select the onboard FDD port.

Onboard Serial Port 1/2

These fields allow you to select the onboard serial ports and their addresses. The default values for these ports are:

Serial Port 1	3F8 / IRQ4
Serial Port 2	2F8 / IRQ3

UART Mode Select

This field determines the UART mode in your computer. The settings are Normal, IrDA and ASKIR. The default value is ***Normal***.

Onboard Parallel Port

These fields allow you to select the onboard parallel ports and their addresses. The default value for this port is:

Parallel Port	378H/IRQ7

Parallel Port Mode

To operate the onboard parallel port as Standard Parallel Port only, choose "SPP". To operate the onboard parallel port in the EPP modes simultaneously, choose "EPP". By choosing "ECP", the onboard parallel port will operate in ECP mode only. Choosing "ECP+EPP" will allow the onboard parallel port to support both the ECP and EPP modes simultaneously.

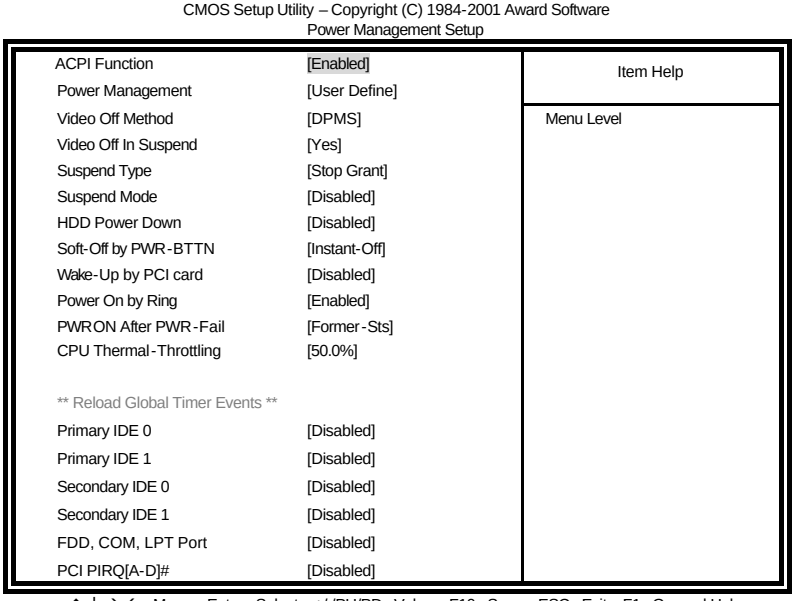
The ECP mode has to use the DMA channel, so choose the onboard parallel port with the ECP feature. After selecting it, the following message will appear "ECP Mode Use DMA". At this time, the user can choose between DMA channels ***3*** or ***1***.

The onboard parallel port is EPP Spec. compliant, so after the user chooses the onboard parallel port with the EPP function, the following

message will be displayed on thescreen: ” EPP Mode Select” . At this time either ***EPP 1.7*** spec. or ***EPP 1.9*** spec. can be chosen.

6. Power Management Setup

The Power Management Setup allows you to save energy of your system effectively. It will shut down the hard disk and turn off video display after a period of inactivity.



ACPI function

ACPI stands for Advanced Configuration Power Interface. The default setting of this field ***Disabled***.

Power Management

This field allows you to select the type of power saving management modes. There are three selections for Power Management.

User Define <Default>	Each of the ranges is from 1 min. to 1hr. Except for HDD Power Down which ranges from 1 min. to 15 min.
Min Saving	Minimum power management
Max Saving	Maximum power management.
Disabled	No power management.

Video Off Method

This field defines the Video Off features. There are three options.

V/H SYNC + Blank	This selection will cause the system to turn off the Vertical and horizontal synchronization ports and Write blanks to the video buffer
DPMS	Allows the BIOS to control the video display card if it supports the DPMS feature
Blank Screen	This option only writes blanks to the video buffer

Video Off In Suspend

This determines the manner in which the monitor is blanked. The default is ***Yes***.

Suspend Type

Select the Suspend Type.

PWRON Suspend	Use the power button to decide whether the system is in suspend or not.
Stop Grant <Default>	When the system is idle, it will be in suspend mode.

Suspend Mode

When enabled, and after the set time of system inactivity, all devices except the CPU will be shut off.

Disabled	Disable the Suspend mode
1 Hour	After 1 hour of system inactivity, enter Suspend mode
40 min	After 40 min of system inactivity, enter Suspend mode
30 min	After 30 min of system inactivity, enter Suspend mode
20 min	After 20 min of system inactivity, enter Suspend mode
12 min	After 12 min of system inactivity, enter Suspend mode
8 min	After 8 min of system inactivity, enter Suspend mode
4 min	After 4 min of system inactivity, enter Suspend mode
2 min	After 2 min of system inactivity, enter Suspend mode
1 min	After 1 min of system inactivity, enter Suspend mode

HDD Power Down

When enabled, and after the set time of system inactivity, the hard disk drive will be powered down while all other devices remain active.

Disabled <Default>	Don' t Enter the HDD power down mode
1 min ~ 15 min	After the set time of system inactivity, HDD power down

Soft-Off by PWR-BTTN

This field defines the power-off mode when using an ATX power supply. There are two modes:

Instant-Off <Default>	The mode allows powering off immediately upon pressing the power button
Delay 4 Sec	The system powers off when the power button is pressed for more than four seconds or places the system in a very low-power-usage state, with only enough circuitry receiving power to detect power button activity.

Wake-Up by PCI card/Power On by Ring

Enabled <Default>	Wake up the system from modem or LAN
Disabled	Disable the modem or LAN to wake up the system

CPU Thermal-Throttling

When the system enters suspend mode, the CPU clock runs only part of the time. You may select the percent of time that the clock runs.

87.5%	87.5% time that the CPU clock runs
75.0%	75.0% time that the CPU clock runs
62.5%	62.5% time that the CPU clock runs
50.0% <Default>	50.0% time that the CPU clock runs
37.5%	37.5% time that the CPU clock runs
25.0%	25.0% time that the CPU clock runs
12.5%	12.5% time that the CPU clock runs

Reload Global Timer Events

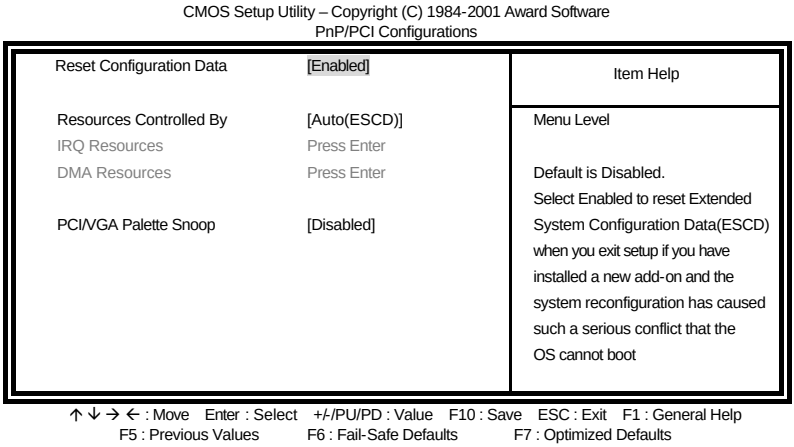
This section determines the reloading of the ' timers' after entering the Full On. You can enable or disable the monitoring of IRQ 8 (Real Time Clock) so it does not awaken the system from Suspend mode.

PM Events

The VGA, LPT & COM, HDD & FDD, DMA/master, PWR-On by Modem/LAN, RTC Alarm Resume and Primary INTR section are I/O events which can prevent the system from entering a power saving mode or can awaken the system from such a mode. When an I/O device wants to gain the attention of the operating system, it signals this by causing an IRQ to occur. When the operating system is ready to respond to the request, it interrupts itself and performs the service. If activity is detected from any enabled IRQ channels, the system wakes up from suspended mode.

7. PNP/PCI Configuration

This option configures the PCI bus system. All PCI bus systems on the system use INT#, thus all installed PCI cards must be set to this value.



Reset Configuration Data

Normally, you leave this field ***Disabled***. Select ***Enabled*** to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system can not boot. The default value is ***Disabled***.

Resources Controlled by

This PnP BIOS can configure all of the boot and compatible devices automatically. However, this capability needs you to use a PnP operating system such as Windows 95/98. If you set this field to " manual" choose specific resources by going into each of the sub menu that follows this field.

Auto(ESCD) <Default>	PnP BIOS configure all compatible devices automatically
Manual	User can assign IRQ & DMA to the devices

IRQ/DMA Resources

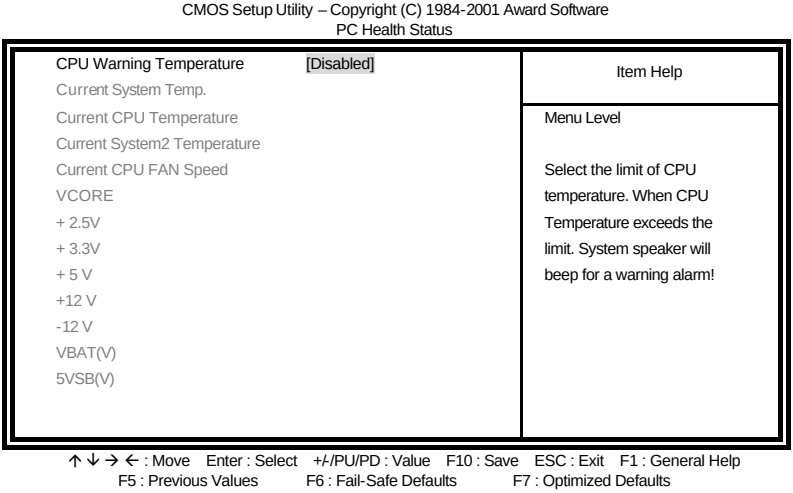
These fields allow you to determine the IRQ/DMA assigned to the ISA bus and is not available to any PCI slot.

PCI/VGA Palette Snoop

Some non-standard VGA display cards may not show colors properly. This field allows you to set whether MPEG ISA/VESA VGA cards can work with PCI/VGA or not.

Enabled	PCI/VGA can work with MPEG ISA/VESA VGA card
Disabled <Default>	PCI/VGA can not work with MPEG ISA/VESA VGA card

8. PC Health Status



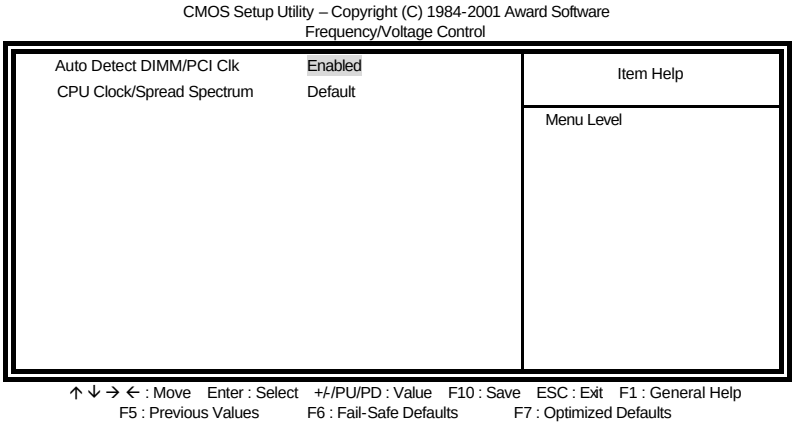
CPU Warning Temperature

This field sets the threshold temperature at which an alert is sounded through the system' s speaker. The CPU temperature is monitored by the onboard thermal sensor to prevent the CPU from overheating.

Current System/CPU Temperature/System2 Temperature/Current CPU Fan Speed/ VCORE / +2.5V/+3.3V/+5V/+12V/-12V/VBAT(V)/5VSB(V)

These items will show the CPU/FAN/System voltage chart and FAN speed.

9. Frequency/Voltage Control



Auto Detect DIMM/PCI Clk

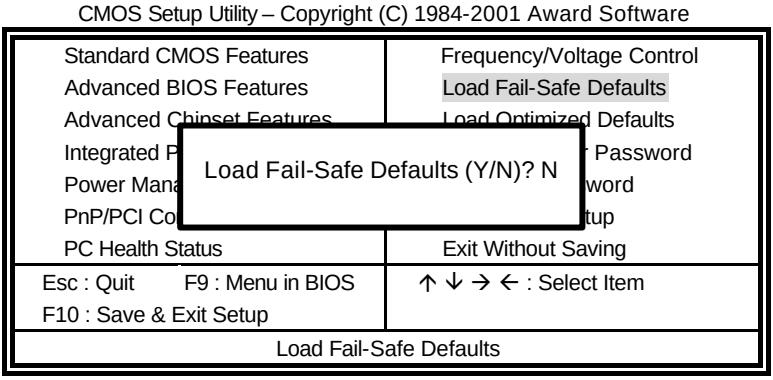
This item allows you to enable/disable auto detect DIMM/PCI Clock. The default is ***Disabled***.

CPU Clock/Spread Spectrum

This item allows you to set the CPU Clock/spread Spectrum.

10. Load Fail-Safe Defaults

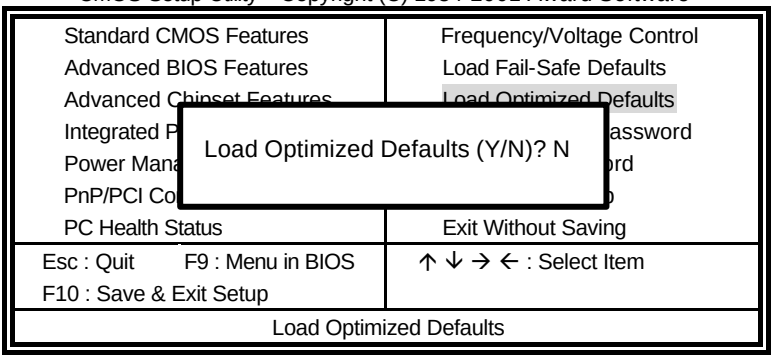
This option allows you to load the troubleshooting default values permanently stored in the BIOS ROM. These default settings are non-optimal and disable all high-performance features.



To load Fail-Safe defaults value to CMOS SRAM, enter " Y" . If not, enter " N".

11. Load Optimized Defaults

This option allows you to load the default values to your system configuration. These default settings are optimal and enable all high performance features.

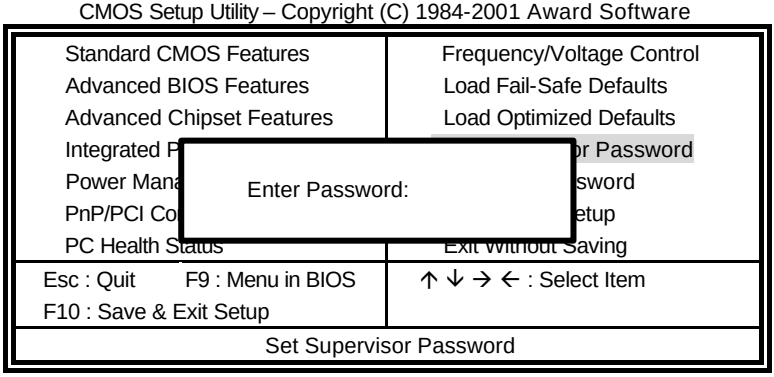


To load Optimized defaults value to CMOS SRAM, enter " Y" . If not, enter " N".

12. Set Supervisor / User Password

These two options set the system password. Supervisor Password sets a password that will be used to protect the system and Setup utility. User Password sets a password that will be used exclusively on the system. To specify a password, highlight the type you want and press <Enter>. The Enter Password: message prompts on the screen. Type the password, up to eight characters in length, and press <Enter>. The system confirms your password by asking you to type it again. After setting a password, the screen automatically returns to the main screen.

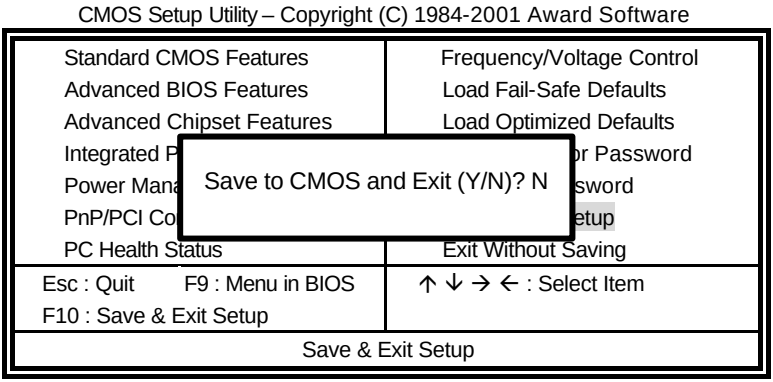
To disable a password, just press the <Enter> key when you are prompted to enter the password. A message will confirm the password to be disabled. Once the password is disabled, the system will boot and you can enter Setup freely.



13. Save & Exit Setup

Save & Exit Setup

This option allows you to determine whether to accept the modifications or not. Typing ***Y*** will quit the setup utility and save all changes into the CMOS memory. Typing ***N*** will return to Setup utility.



Exit Without Saving

Select this option to exit the Setup utility without saving the changes you have made in this session. Typing ***Y*** will quit the Setup utility without saving the modifications. Typing ***N*** will return to Setup utility.